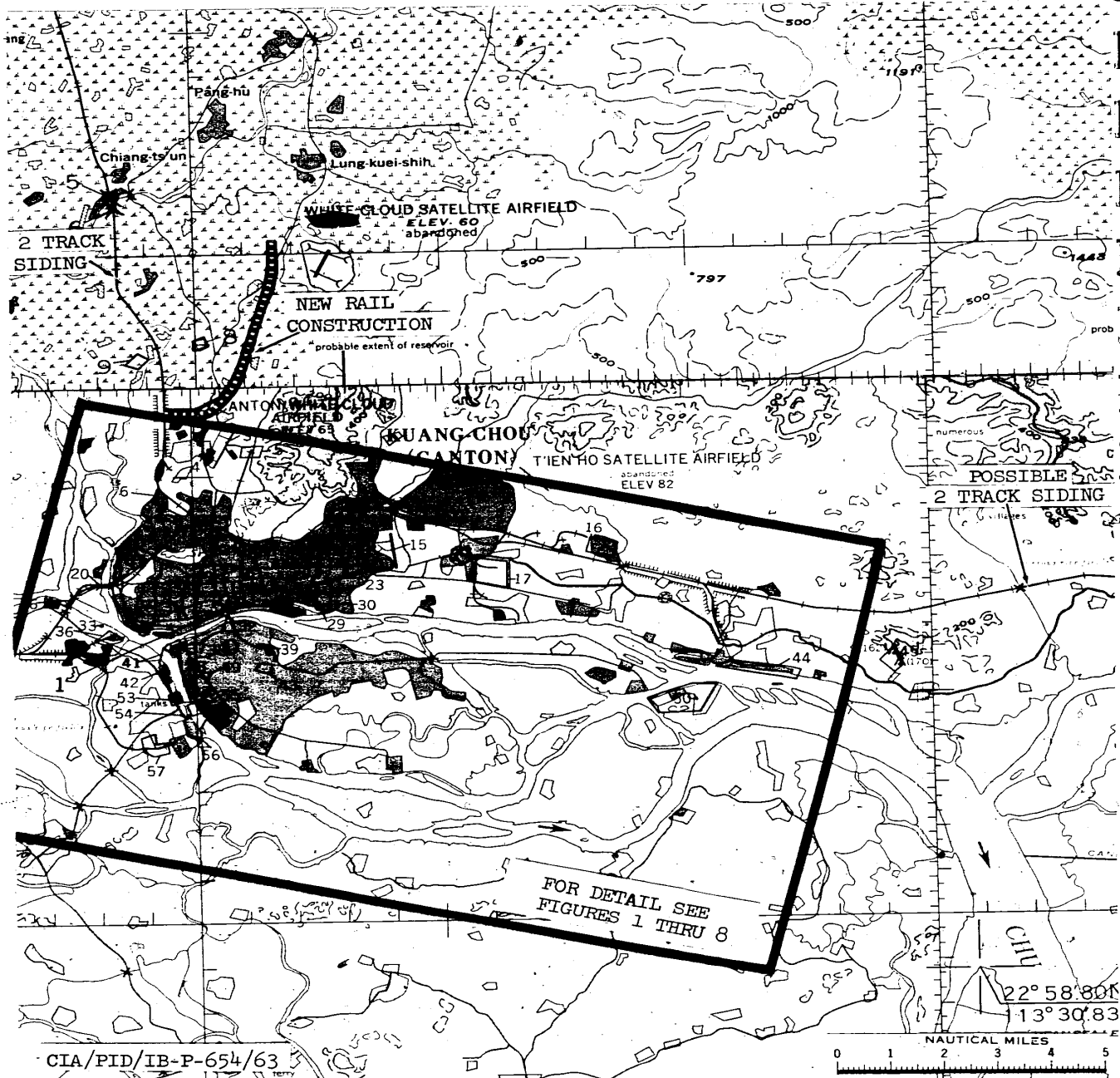


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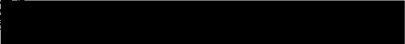
CIA/PID/IB-P-654/63

LOCATOR MAP


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TCS No. 4682/63  
IB No. 277/63  
31 October 1963  
Copy 1 of 1

MEMORANDUM FOR: Chief, Manufacturing and Services Division, ORR  
ATTENTION :   
THROUGH : Chief, Requirements Branch, Reconnaissance Group, CGS  
FROM : Chief, CIA/PID (NPIC)  
SUBJECT : Rail Study of Kuang-chou (Canton), China  
REFERENCES : (1) ORR Requirement C-RR3-80,542  
(2) CIA/PID Project No. C 1248-63

1. This memorandum is in answer to the above referenced requirement concerning a detail analysis of the rail complex serving Canton and its environs. This memorandum is the second and final part of the study covering this complex.

2. The completion of this study was made possible through a complete analysis of all available overflight photography of the Canton Area obtained during the period between  The photo missions scanned for this study are:



Of these missions listed above, items "a", "c", and "f" were selected and used extensively throughout this study. Items "a" and "c" were selected on the basis of photo quality and time span between missions. This selection provided the necessary prerequisites for good quality PI material with a time base long enough to permit comparative analysis and search for any indications of new construction within the complex. Item "f", although the most recent of the group, was of very poor photo quality and therefore was utilized only to corroborate some of the findings gleaned from the earlier material; and where possible, extend the development to the beginning of 

3. In addition to a complete search and analysis of available photography, a similar search was made for existing reports, charts and diagrams of the rail complex, for use as a base for changes and additions that have taken place within the above mentioned time period. A selection for a single base from the items collected was not practicable because of the base itself; that is, most of them were either in error, too old and/or too cluttered. So it was necessary to prepare a photo mosaic (See Figure #1). To this base the resultant analysis is added through the use of overlays. Also, supplemental enlargements of the more important facilities have been provided herein (See Figures 2-8).

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GROUP 1  
Excluded from automatic  
downgrading and  
declassification

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SUBJECT: Rail Study of Kuang-chou (Canton), China

4. The photo mosaic was made large enough to include the areas of search included in the first memorandum of this requirement concerning the overall ship count within the Canton Area. In addition, this graphic will probably be used as a base for your requirement now with the Industrial Branch, which concerns the Canton Port Area and the Whampoa Naval Base.

5. The Canton Area is served by single track lines from the north, east and south. There are several indicators of provision for future expansion to double track with the newly constructed bridges and road beds in the western part of the city. Only two passing-sidings were observed within close proximity to the city. One on the line entering from the north; and, the other on the line entering the city from the east. These areas are located just beyond the limits of coverage contained herein. These sidings are: (1) two track sidings off of the main line approximately 8 nm NNW of the city at 23 14N/113 13E; (2) possible two track siding off of the main line approximately 15 nm ENE of Canton at 23 07N/113 31E (See Locator Map for position). Considerable expansion has taken place within the Canton rail complex during the [REDACTED] period. The major areas of expansion are as follows:

a. A new probable branch line under construction - approximately 6 nm of road bed in various stages of construction beginning at the main line at 23 11N/113 14E continues on a northeasterly course to a point approximately one nautical mile west of White Cloud Airfield (See Locator Map).

b. New highway railroad bridge (two sections) has been constructed since [REDACTED]. Only the bridge piers were present on the [REDACTED]. Since [REDACTED] the set of piers under construction at that time just off the southern tip of Niu-kusha (Island) at 23 07N/113 11E appear to have been abandoned for a new set which is located just west of the original. Although the bridges and approaches are single track, provisions have been made for a double track. Storage along the track in several spots tends to indicate accumulation of equipment for construction of the second track to begin in the near future (See Figure 1).

c. Branch line serving a new industrial complex south of Canton reportedly to be an iron and steel complex (See Figure #1).

d. New rail construction in and around the "triangle" north of the city consisting of (1) new turning wye, (2) new 3 track yard under construction, (3) new beds indicating several spurs in various stages of construction (See Figures 1-3).

e. Several new spurs being added to serve new industries in the area under development east of Canton (See Figure 1).

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f. New yard has been added to support the Huang-pu Railroad Terminal (See Figure 7).

6. In addition to the overlay showing the overall view of the Canton rail complex, any yard having associated repair and/or maintenance facilities is treated separately herein to show the degree of change or type of activity. These yards are as follows:

a. Locomotive repair and maintenance - the only locomotive repair facility in Canton is located in the northwest section of the city at 23 09N/113 14E. This area contains approximately 10 large buildings, about 25 smaller miscellaneous buildings and a turning wye (See Figure 2). The larger heavy constructed buildings appear to be equipped to handle major repair and maintenance assignments. This yard has almost doubled in building floor space since [redacted]. Those buildings underlined with white tape on the overlay to Figure #2 are new since [redacted] in addition to these, several smaller buildings have been added during this same period.

b. Kuang-chou Railroad Yards and Shops, Hsi-tsun [redacted] (See Figure 3). This yard and facilities appear to be equipped to perform major car repair and maintenance assignments. The buildings within this area that are new since [redacted] include the large building underlined on the accompanying overlay to Figure #3 and all of the other buildings within close proximity to it; and the large building located approximately 700' NE of it. Also, other developments since [redacted] include (See letters on Figure 3):

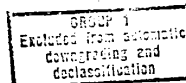
(1) Area "A" includes a new by-pass line with a yard under construction. This by-pass line replaces the old line shown at "B". The old bed appears to be in various stages of dismantlement.

(2) Area "C" is where the rail spur serving White Cloud Airfield connected with the old by-pass line. It is now connected to the new by-pass line (See also Figure 1).

(3) Area "D" is a new line connecting a large turning wye to the new rail construction.

(4) Scarring with new grading suggestive of a possible rail bed under construction.

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C. Probable transshipment area and yard (See Figure 4). This area is essentially the same as it appeared in [REDACTED] except the rail spur annotated "B" is a new development. A possible station may be associated with the yard shown in the upper right portion of Figure #4.

25X1D d. Passenger station and car maintenance area, this may be the Kuang-chou Railroad Repair Shops SE [REDACTED] (See Figure 5). This area consists of a large passenger station and several buildings probably engaged in passenger car maintenance activity. Since [REDACTED] the large (1500' in [REDACTED] building was extended to its present length; a long building north of the 200' x 50' building in the car service area has been removed; and several small buildings have been added in the service area. Several maps indicate rail spurs branching from this line between the rail terminus and the intersection with the mainline, this section of rail appears to be clean of any old or new rail spurs branching from the line (as is indicated on Figure 1).

e. The Kuang-chou Railroad Classification Yards, Wong-sha (See Figure 6). This area is essentially the same as it appeared in [REDACTED] except:

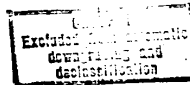
(1) The coal handling and storage area appears to have shifted from this area to the newly constructed yards at the Huang-pu Railroad Terminal Yard. For the comparison between [REDACTED] and [REDACTED] compare Figures 6 and 8. For comparison of the Huang-pu Yards see Figure 7.

(2) Minor additions have been constructed in the western part of the yard. These being maintenance/storage-type structures, two of which are underlined by tape on the accompanying overlay to Figure 6.

(3) A large area has been reclaimed from the river just northwest of the yard area. This area will probably be used as a storage area and probably for small industries is indicated by new construction there on the later photography. (See Item "A" Figure 6).

(4) Only one major change has developed in the rail-to-river traffic, this is the addition of two probable grain handling facilities as indicated by Item "B" on Figure 6.

f. Huang-pu Railroad Terminal Yard. This yard has changed considerably since [REDACTED] as is indicated by the three-way comparison in Figure 7. These changes include:

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(1) A new rail spur has been constructed from the terminal line west of the port area to an unidentified island in the river, here a yard and handling facilities for coal have been completed since [REDACTED]

(2) New storage area (still U/C in [REDACTED]) has been added along the river east of the port area since [REDACTED] (See item "B" - Figure 7). This area will be rail served when completed.

(3) The large sawmill industry located west of the port area (See Item "A" - Figure 7), has been replaced by other probable small industrial facilities.

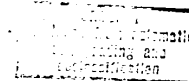
g. Kuang-chou Railroad Yards, Shin-wei-tang (See Figure 8). This area is essentially the same as it was in [REDACTED] and like its associated yard across the Chu-chiang (River), this lack of activity increase is probably due to the construction of the new highway and railroad bridge to the west of these yards. This new bridge construction appears to have cut to a minimum the amount of rail traffic passing from yard to yard across the river via ferry boats. Today, both yards are probably used in support of river-port type traffic. The area annotated "search light unit" is given on some maps as a hook spur - this is actually a road serving the unit and its supporting buildings.

7. The analyst assigned to this project was [REDACTED] who may be contacted directly on extension 2607 should you have any questions concerning this study.

ENCLOSURES:

- 1 Annotated Photo Mosaic w/Overlay (CIA/PID/IB-P-590/63)
- 1 Annotated Bocator Map (CIA/PID/IB-P-654/63)
- 7 Annotated Photo Enlargements w/Overlays  
(CIA/PID/IB-P-619/63 thru P-624/63) and (CIA/PID/IB-P-628/63)

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3300'

APPROX  
3000'

175'x75'  
200'x75'

75'x50'

190'x50'  
200'x30'

75'x60'

150'x60'

150'x75'

160'x35'

130'x50'

230'x35'



PID/IB-277/63

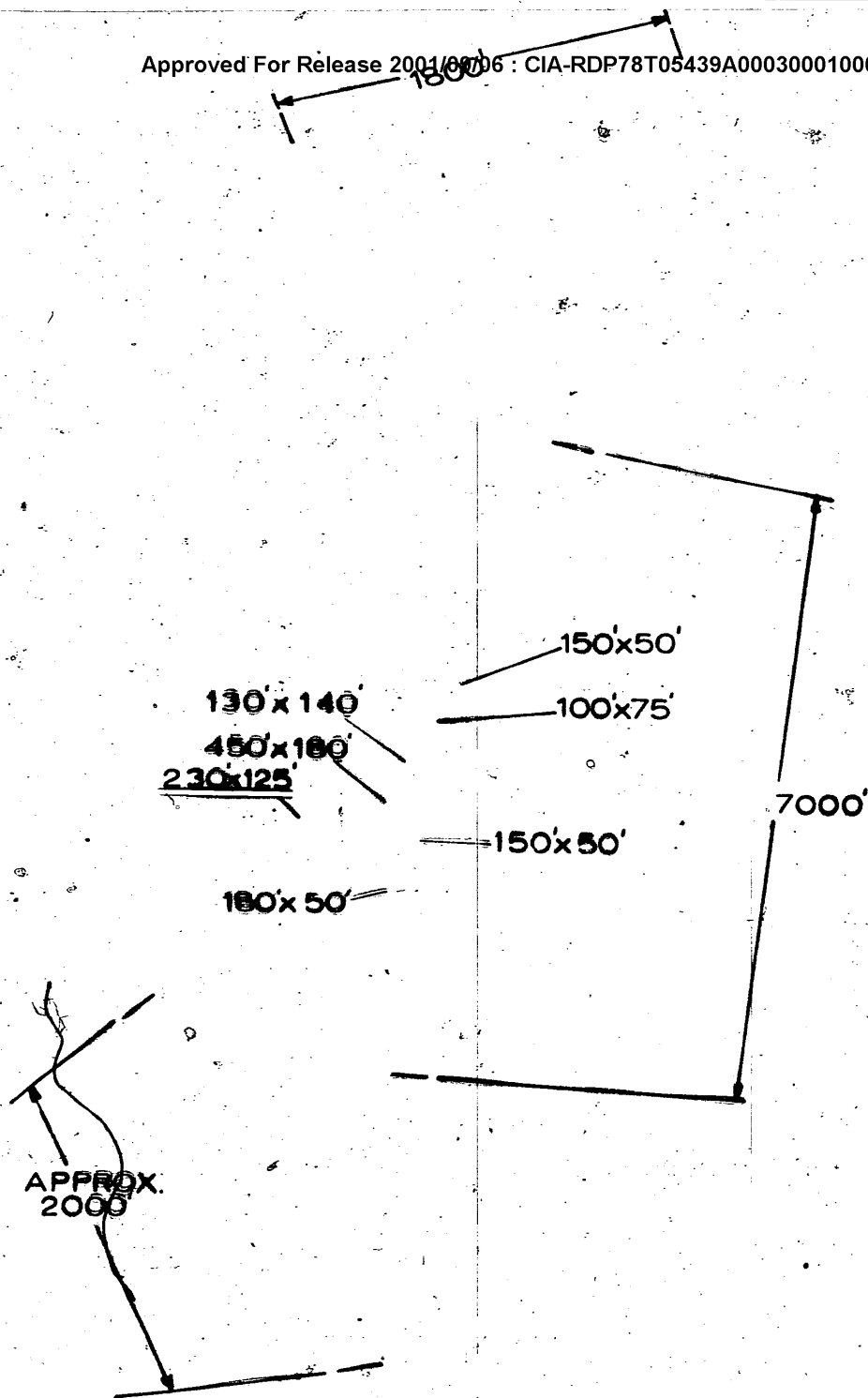
RR YARD  
23 10N - 113 14E

CIA/PID/IB-P-619/63

FIGURE #2

LOCOMOTIVE REPAIR AND  
MAINTENANCE FACILITY  
23° 09'N - 113° 14'E

PHOTO DATA:



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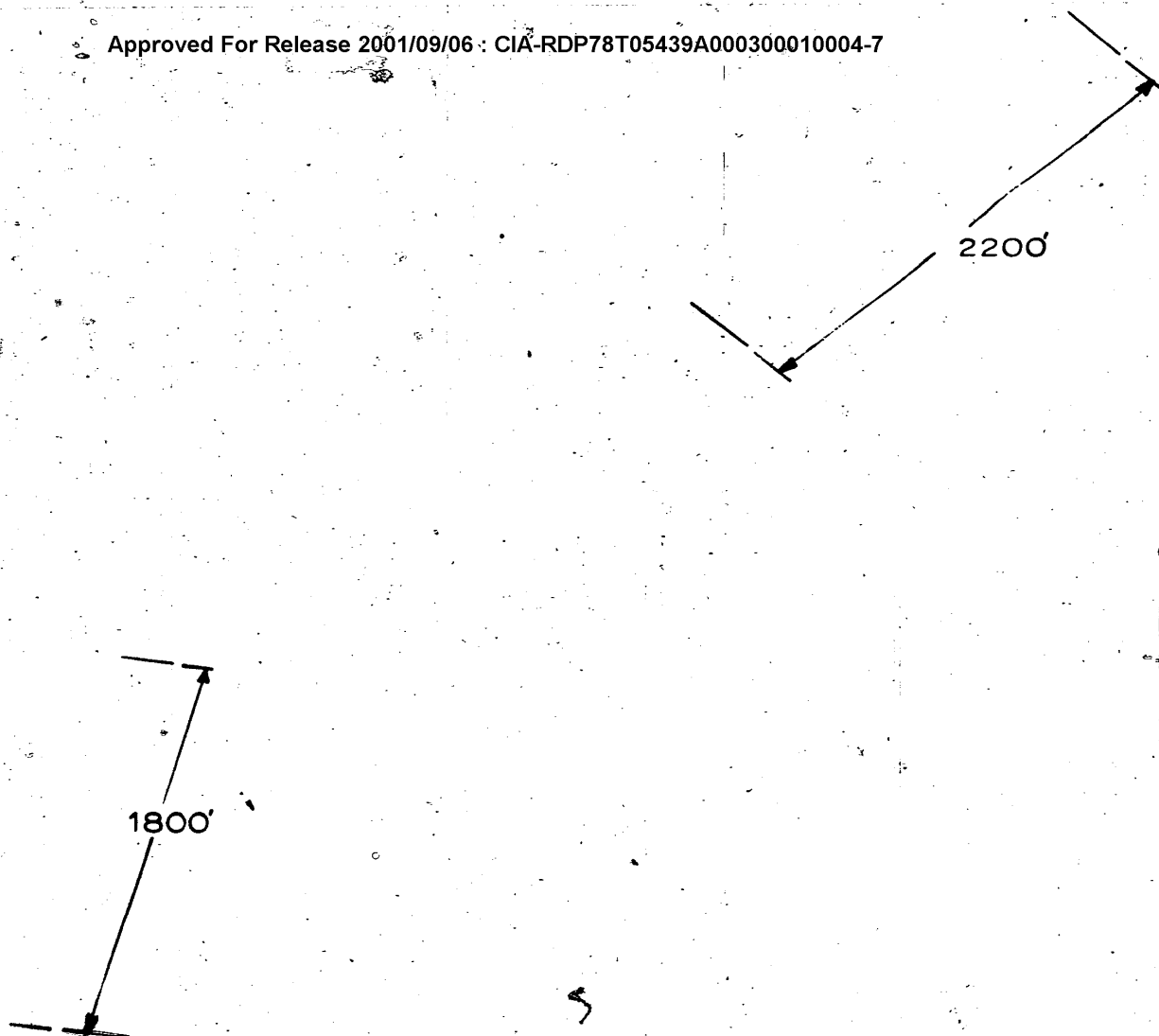
Approved  
RR YARD  
23 09N - 113 15E

KUANG-CHOU RR YARDS  
AND SHOPS. HSI-TSUN  
23° 08'N - 113° 14'E

PHOTO DATA:

CIA/PID/IB-P-620/63

FIGURE #3





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STORAGE AREA

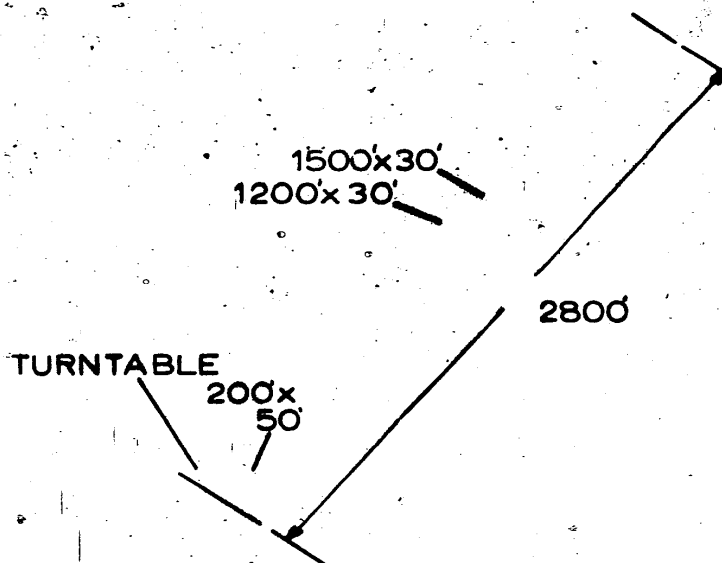
RR YARD  
23 09N - 113 18E

PROBABLE TRANSHIPMENT AREA  
23° 09'N - 113° 17'E

PHOTO DATA:

CIA/PID/IB-P-621/63

FIGURE #4



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PASSENGER STATION

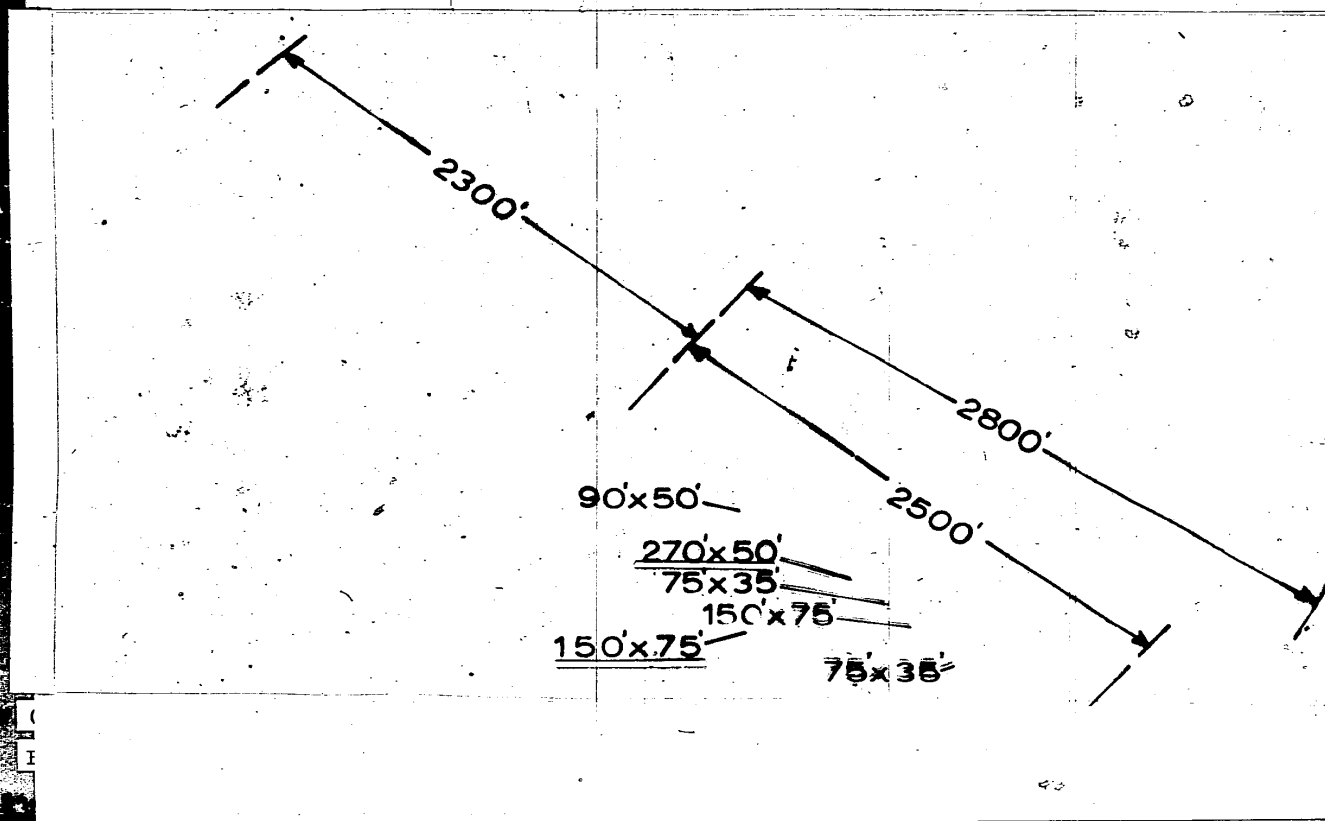
CAR SERVICE AREA

PASSENGER STATION  
AND CAR MAINTENANCE  
(Prob. Kuang-chou RR Repair  
Shops SE [REDACTED]  
23° 07'N - 113° 16'E

PHOTO DATA:

CIA/PID/IB-P-622/63

FIGURE #5





PID/IB-277/63

KUANG-CHOU RR CLASSIFICATION  
YARDS, WONG-SHA

23° 06'N - 113° 13'E

PHOTO DATA:

ABANDONED RAIL SECTION

CIA/PID/IB-P-623/63

FIGURE #6

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SPUR LINE  
AND YARD U/C

SPUR LINE AND  
YARD COMPLETE  
AND OPERATIONAL

PID/IB-277/63

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PHOTO COMPARISON OF  
HUANG-FU RR TERMINAL YARD

23° 05'N - 113° 26'E

25X1A

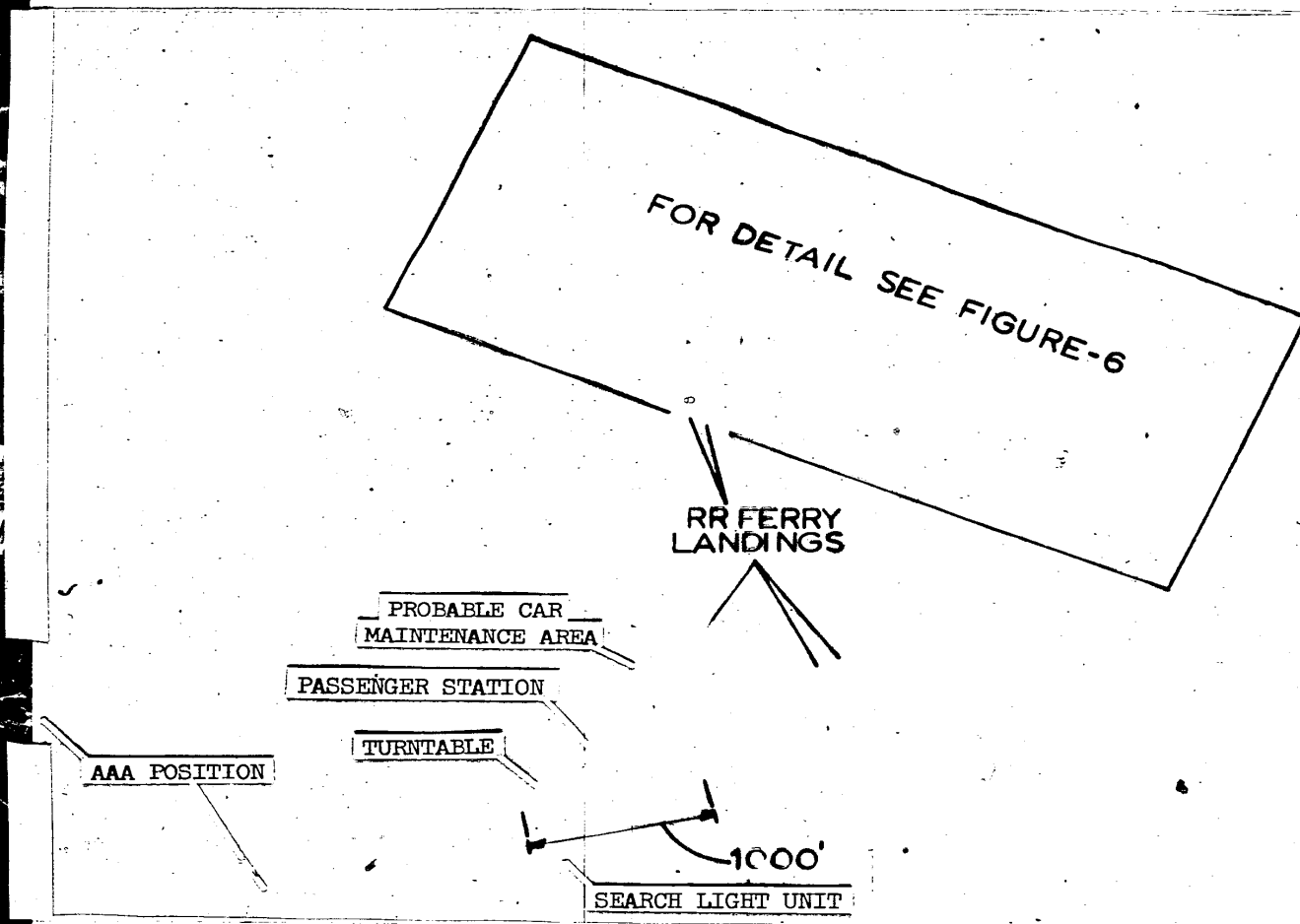
25X1D 25X1D

2

CIA/PID/IB-P-624/63

FIGURE #7

B



PID/IB-277/63

BRIDGE U/C

Approved for

KUANG-CHOU  
RR CLASSIFICATION  
YARDS, WONG-SHA

KUANG-CHOU RR YARDS,  
SHIN-WEI-TANG

23° 06'N - 113° 13'E

PHOTO DATA:

CIA/PID/IB-P-628/63

FIGURE #8

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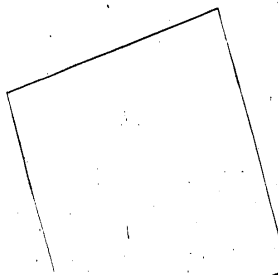
FOR DETAIL  
SEE FIGURE 4



FOR DETAIL  
SEE FIGURE 2



FOR DETAIL  
SEE FIGURE 3



FOR DETAIL  
SEE FIGURE 5

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**FOR DETAIL  
SEE FIGURE 7**



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SEE FIGURE 2

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FOR DETAIL  
SEE FIGURE 3



FOR DETAIL  
SEE FIGURE 5



FOR DETAIL  
SEE FIGURE 6

FOR DETAIL  
SEE FIGURE 8

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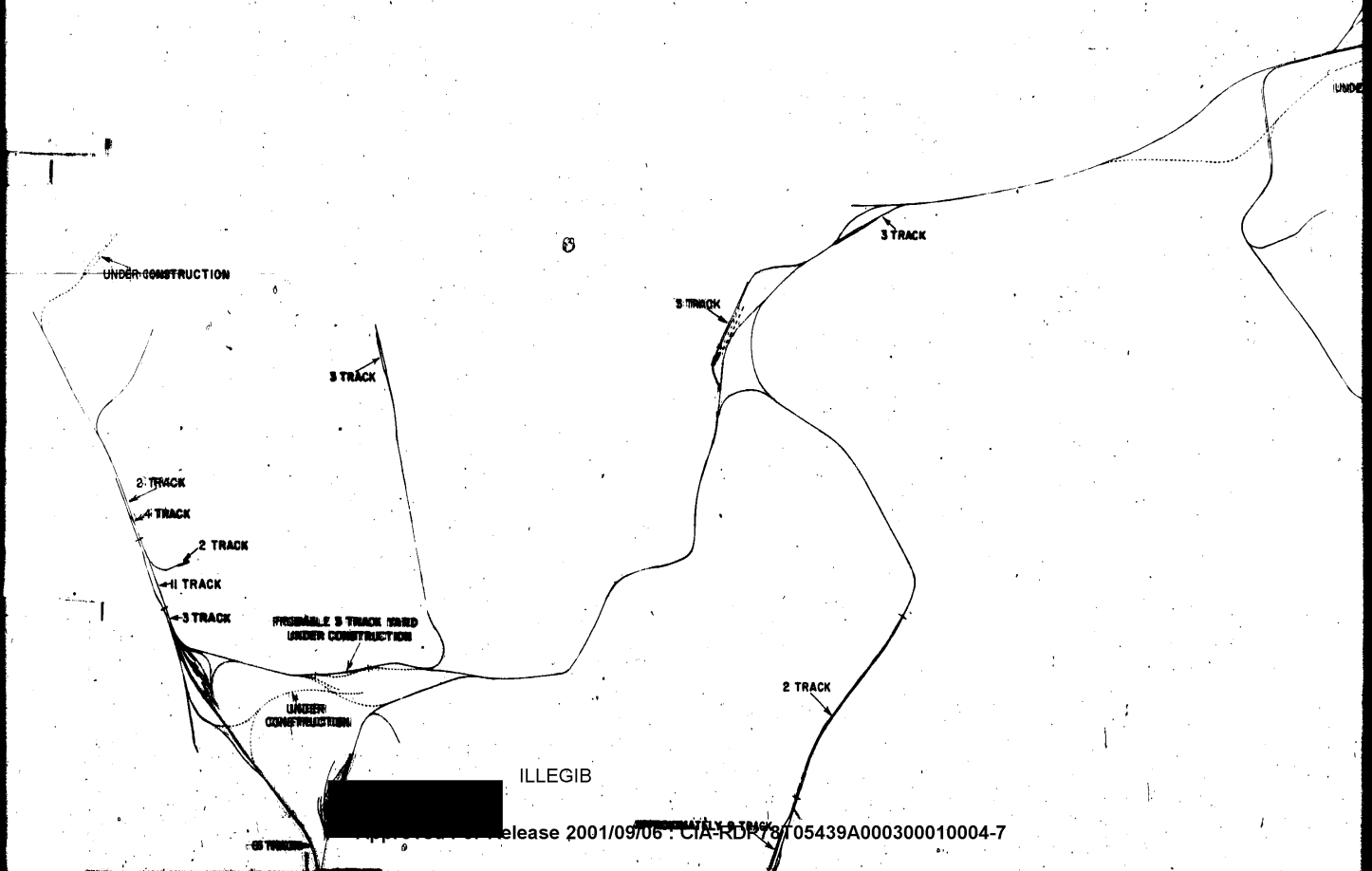
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NOFORN

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OVERLAY DATA OBTAINED FROM PHOTOGRAPHY UP TO [REDACTED]

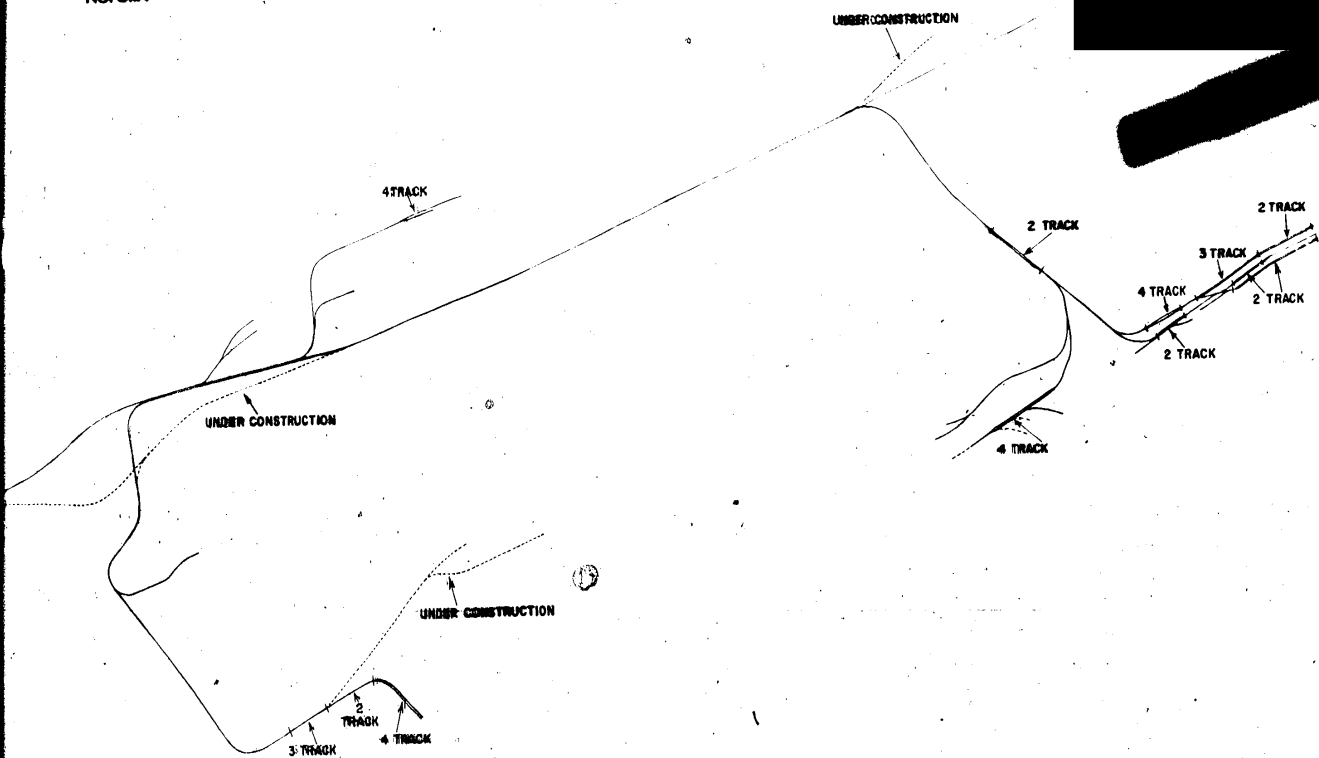
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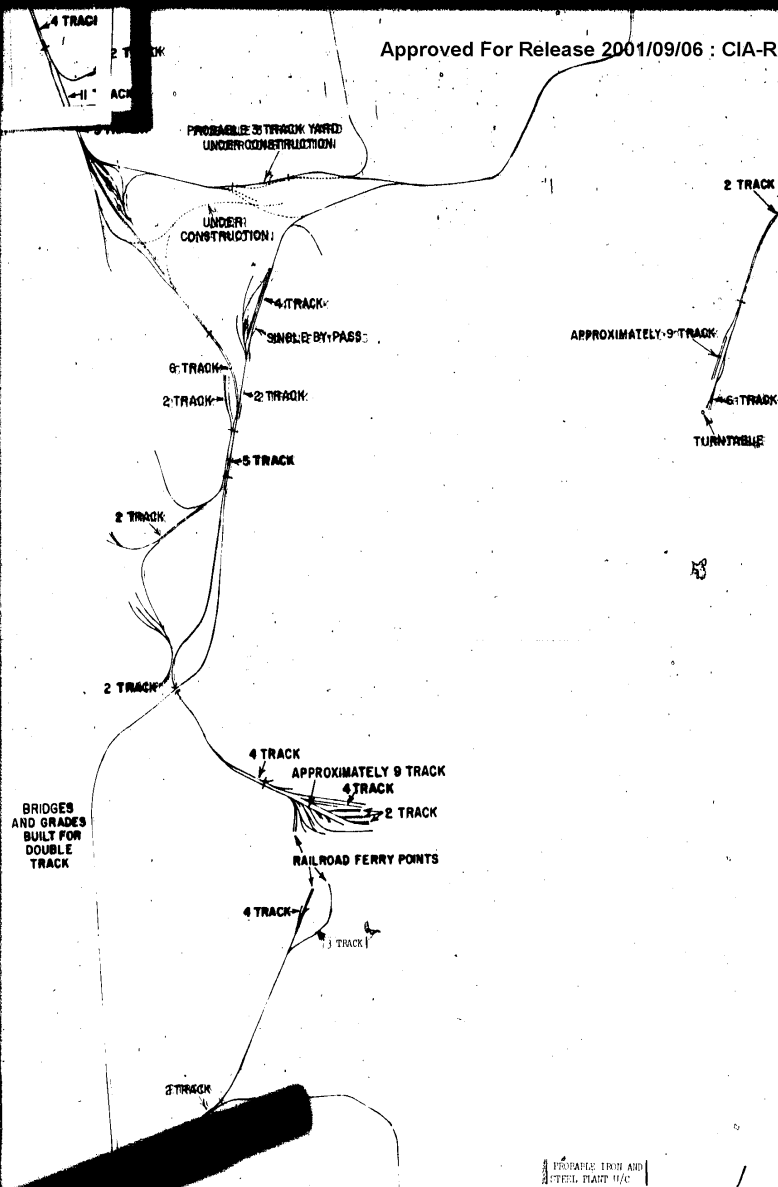
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TOP SECRET-CHES  
NO FOREIGN DISSEM

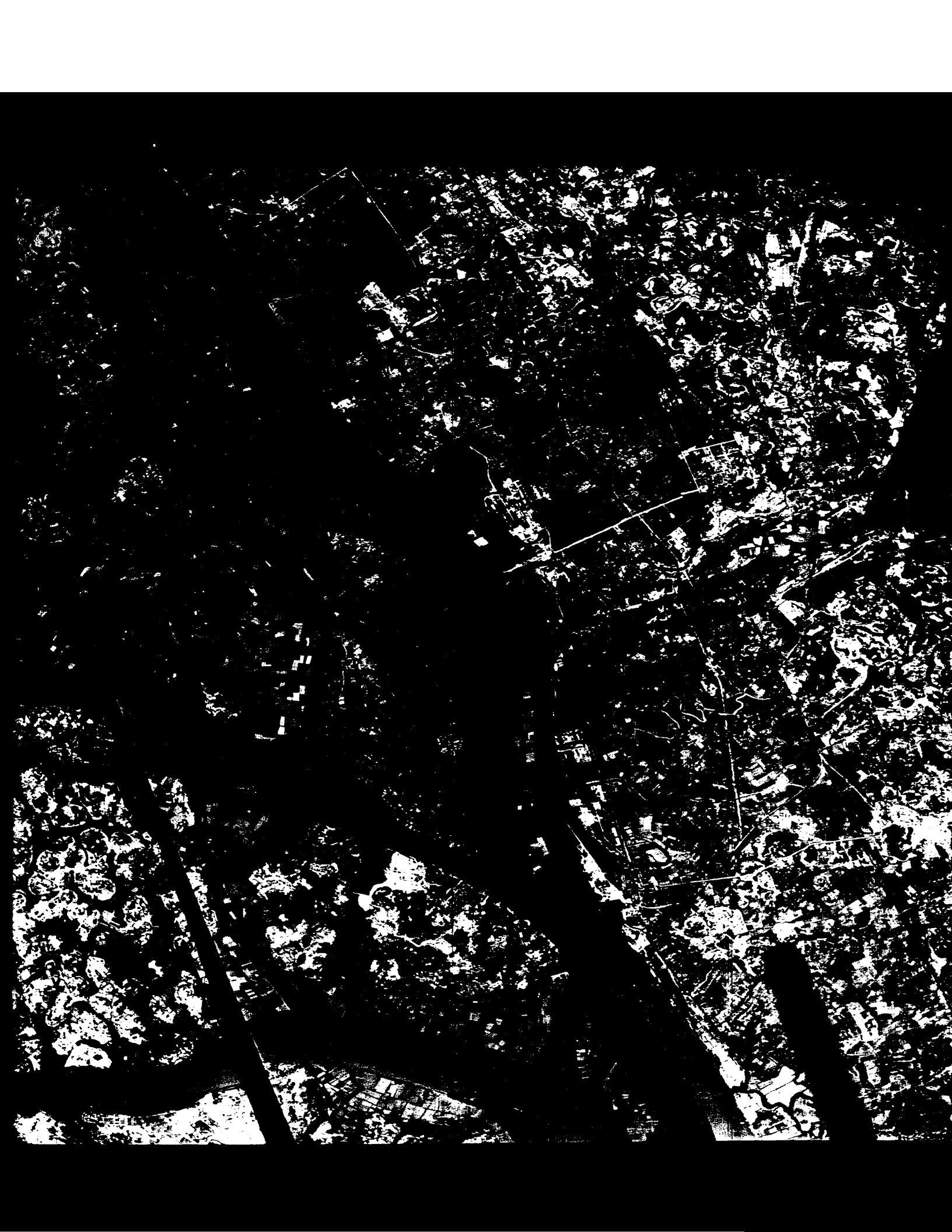
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# KUANG - CHOU (CANTON), CHINA AND VICINITY

UNCONTROLLED PHOTO MOSAIC

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CIA RDP 18 P 590/03





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NO FOREIGN DISSEM

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